

# **Big Hill (BEMS) Sanitary Landfill**

## **Big Hill & Old Forge Roads**

### **Southampton Township Burlington County**

**BLOCK: 2702 LOTS: 3, 4, 5, 7 & 8**

**Community Relations Coordinator: Heather Swartz (609) 984-7135**

#### **SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:**

This site was operated as a sanitary landfill between the late 1960s and 1982. Municipal wastes, septic sludges and some hazardous wastes were deposited in the landfill during this time. The waste fill occupies 40 acres of the 113-acre property. Two sides of the landfill closely border the LeisureTowne housing development, a large retirement community. Burlington Environmental Management Services Incorporated (BEMS, Inc.), which operated the landfill between the mid-1970s and 1982, installed a cap over the western half of the site in 1983 but it failed to perform properly. Precipitation continued to infiltrate the landfill, generating large quantities of leachate that contaminated the ground water and surface waters and caused foul odors. In addition, storm water runoff from the landfill occasionally caused nearby properties to flood, and methane gas generated by the decomposing waste migrated through the soil and into private yards. NJDEP directed BEMS, Inc. to investigate and remediate the site in 1985, but shortly thereafter the company declared bankruptcy. In 1987, NJDEP's Remedial Response Element began a Remedial Investigation/Remedial Action Selection (RI/RAS) to delineate the contamination at the site and evaluate cleanup alternatives. During the course of the RI/RAS, NJDEP implemented several Interim Remedial Measures (IRMs) to address the problems experienced by residents living adjacent to the landfill. The IRMs included installing a methane collection system and a flare to address off-site soil vapors, constructing an on-site storm water retention basin, improving surface water drainage and dredging sediments contaminated with landfill leachate from Canterbury Pond in LeisureTowne.

In 1991, NJDEP signed a Decision Document that required capping of the landfill with a solid waste cap and installation of a sitewide methane gas collection/treatment system and leachate collection system. NJDEP completed construction of these remedial measures in 1999 and operation and maintenance (O&M) of the landfill cap and the methane and leachate controls are underway. The RI/RAS revealed that ground water at the landfill is contaminated with organic and inorganic compounds at levels above New Jersey's ground water quality criteria. Landfill-related contaminants were also detected in several nearby surface water bodies but at levels that do not present an immediate threat to human health or the environment. Based on these findings, NJDEP issued a Decision Document in 1995 that required remediation of the ground water. The ground water remedial action will include re-dredging of Canterbury Pond and additional ground water monitoring. The Remedial Design for the ground water cleanup is underway and expected to be completed in late 2003.